

Fire Effects Information System (FEIS)

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Fire Modeling Institute Information Team

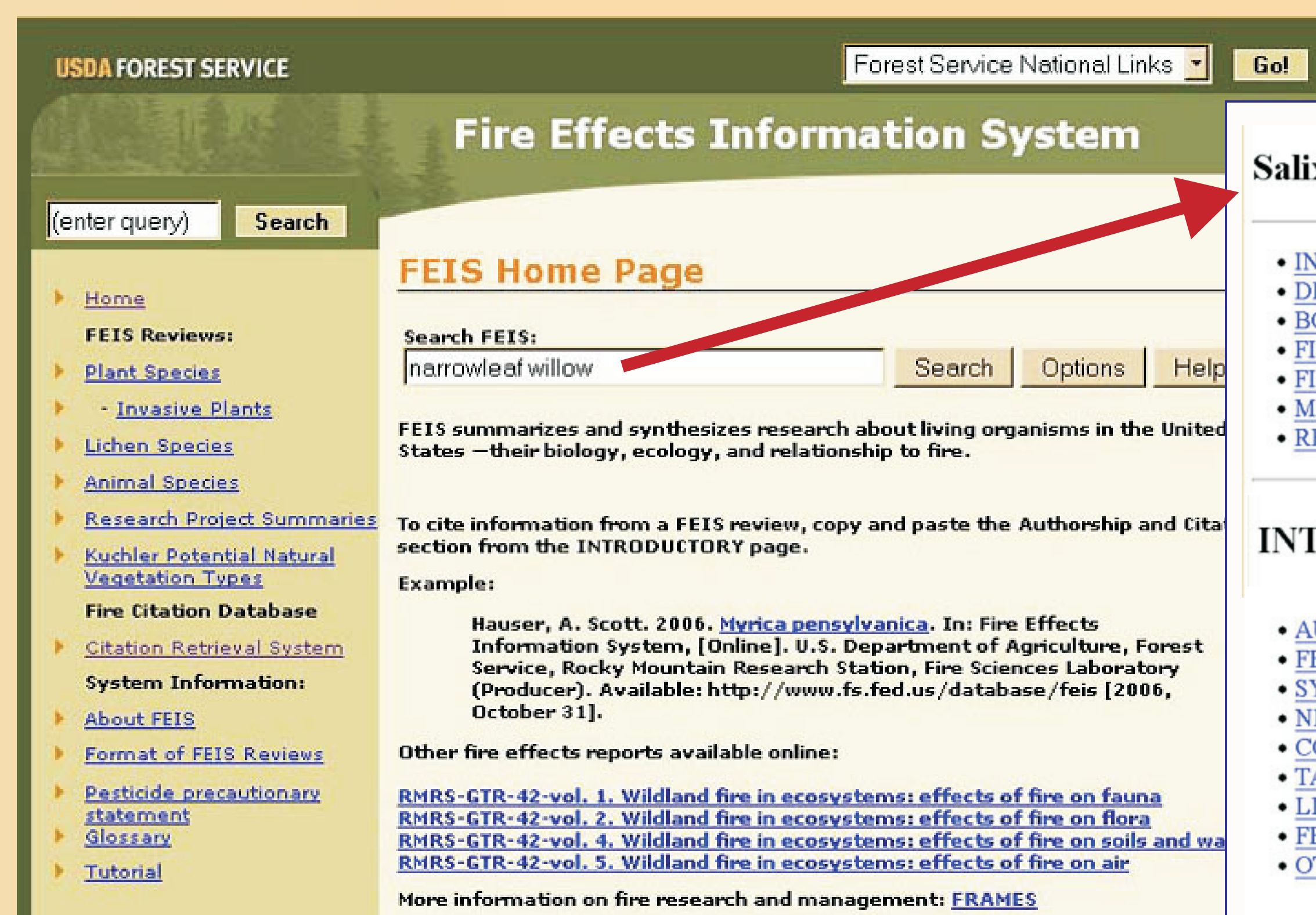
US Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory, Missoula, MT

How does fire affect plants & animals?

FEIS has answers in its 1,000-plus reviews of scientific literature on plant & animal species, including >100 nonnative plants.



Prescribed fire in cogongrass to remove thatch before herbicide application.



Salix exigua

- [INTRODUCTORY](#)
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INTRODUCTORY

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- [TAXONOMY](#)
- [LIFE FORM](#)
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- [OTHER STATUS](#)

AUTHORSHIP AND CITATION:
Anderson, Michelle. 2006. *Salix exigua*. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: <http://www.fs.fed.us/database/feis/> (2006, September 12).



FIRE EFFECTS

SPECIES: *Salix exigua*

- [IMMEDIATE FIRE EFFECT ON PLANT](#)
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- [DISCUSSION AND QUALIFICATION OF PLANT RESPONSE](#)
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IMMEDIATE FIRE EFFECT ON PLANT:
Narrowleaf willow is top-killed by fire [109]. Fires that burn the upper layers of soil can destroy or expose roots and [root crowns](#), resulting in willow mortality [108].

DISCUSSION AND QUALIFICATION OF FIRE EFFECT:
Narrowleaf willow communities often act as firebreaks due to their occurrence on sites with high water tables near streams, but they may burn during unusually dry years [135]. For more information, see the [Fire Ecology](#) section.

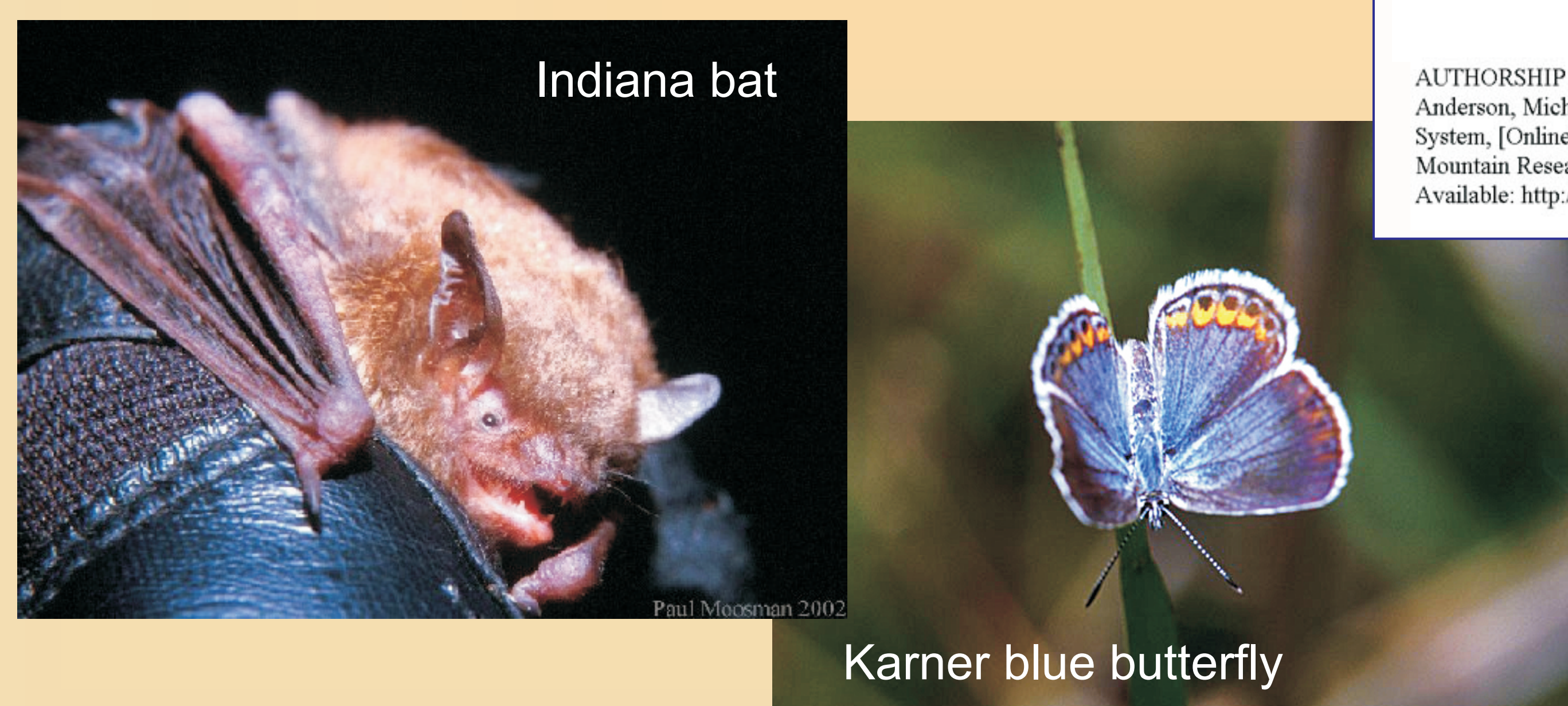
(More.....)

or *Juniperus occidentalis* (western juniper) in southeastern Oregon. The Great Basin Naturalist. 55(1): 37-45. [25666]

134. Moir, William H. 1982. A fire history of the High Chisos, Big Bend National Park, Texas. The Southwestern Naturalist. 27(1): 87-98. [5916]

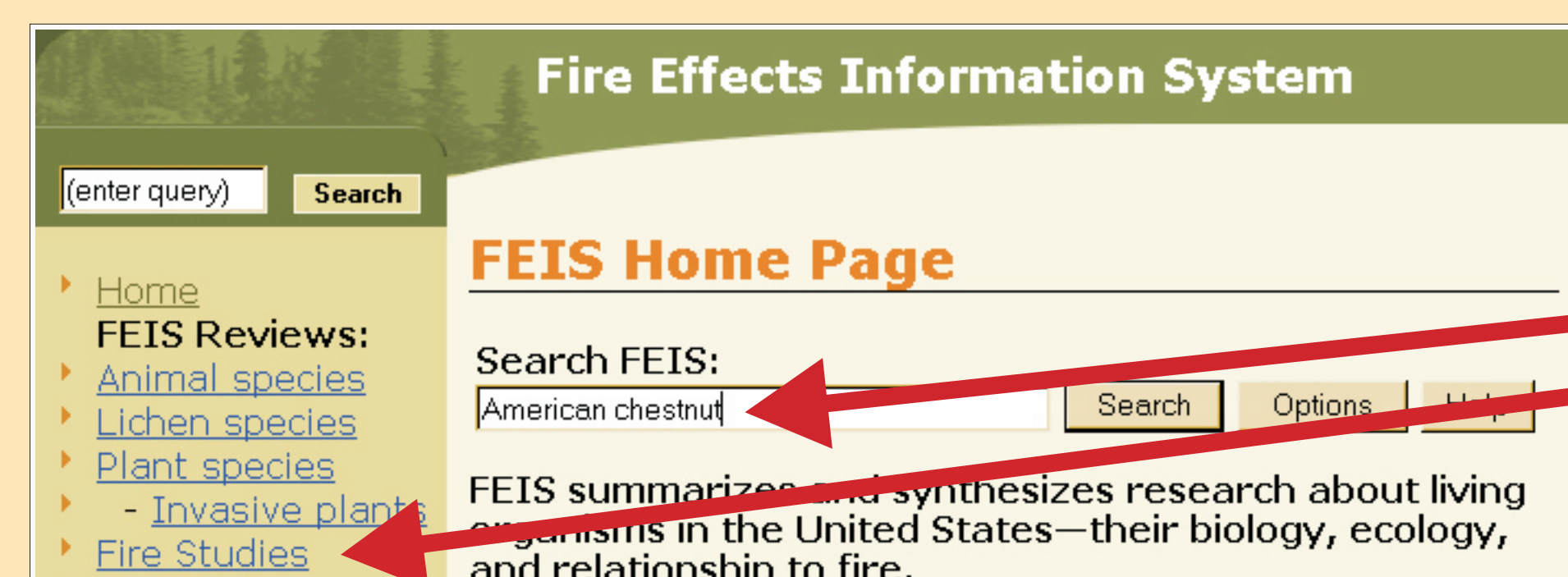
135. Monsen, Stephen B.; Stevens, Richard; Shaw, Nancy L. 2004. *Shrubs of other families*. In: Monsen, Stephen B.; Stevens, Richard; Shaw, Nancy L., comps. Restoring western ranges and wildlands. Gen. Tech. Rep. RMRS-GTR-136-vol-2. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station: 598-698. [52846]

136. Mount, Joanne; Krausman, William; Finch, Deborah M. 1996. Riparian habitat change along the Isleta-Belen reach of the Rio Grande. In: Shaw, Douglas W.; Finch, Deborah M., tech. coords. Desired future conditions for southwestern riparian ecosystems: bringing interests and concerns together. Symposium proceedings.



New: Research Project Summaries (RPSs):

Summaries of fire effects studies with relatively complete descriptions of burning conditions, fire behavior, and burned and unburned vegetation.



Find them through search window or RPS menu

Early postfire effects of a prescribed fire in the southern Appalachians of North Carolina

- [INTRODUCTORY](#)
- [REFERENCES](#)

RESEARCH PROJECT SUMMARY CITATION:
Gucker, Corey L. 2001. Early postfire effects of a prescribed fire in the southern Appalachians of North Carolina. Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: <http://www.fs.fed.us/database/feis/> (2006, September 12).

The coverage of ground layer vegetation on the ridge slightly exceeded prefire levels by the first postfire year.

Pre- and postfire cover of herb-layer vegetation on the ridge [1]

Time	Prefire	Postfire month 3	Postfire month 15
Ground layer species			
Trees			
American chestnut	0	0.7	0
black locust	0.02	0.5	0
black oak			
chestnut oak			
downy serviceberry			

cover (%)

0 0.7 0

0.02 0.5 0

cover (%)

0 0.7 0

0.02 0.5 0

cover (%)

0 0.7 0

0.02 0.5 0

cover (%)

0 0.7 0

0.02 0.5 0

cover (%)

0 0.7 0

0.02 0.5 0

cover (%)

0 0.7 0

0.02 0.5 0

cover (%)

0 0.7 0

0.02 0.5 0

SPECIES INCLUDED IN THE SUMMARY:
This Research Project Summary contains fire response information on the following species. For further information, follow the highlighted links to the FEIS reviews for those species.

Appendix	Common name	Scientific name
	striped maple	Acer pensylvanicum
	red maple	Acer rubrum
	sugar maple	Acer saccharum
	downy serviceberry	Amelanchier arborea
	sweet birch	Betula lenta
	sedge	Carex spp.
	hickory	Carya spp.
	American chestnut	Castanea dentata
	mountain sweetpepperbush	Clethra acuminata

Treatment effects on 52 species

Includes 24 species not reviewed in FEIS

Links to & from FEIS reviews for 28 species



Flowers of mountain-laurel, a fire adapted understory dominant in many plant communities of the eastern United States.



Melaleuca burning in South Florida.



Common reed dominating a creek bank in Piermont Marsh, in Rockland County, New York.



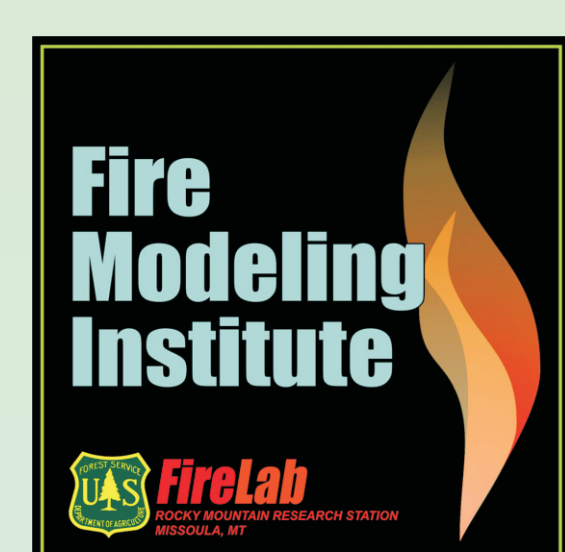
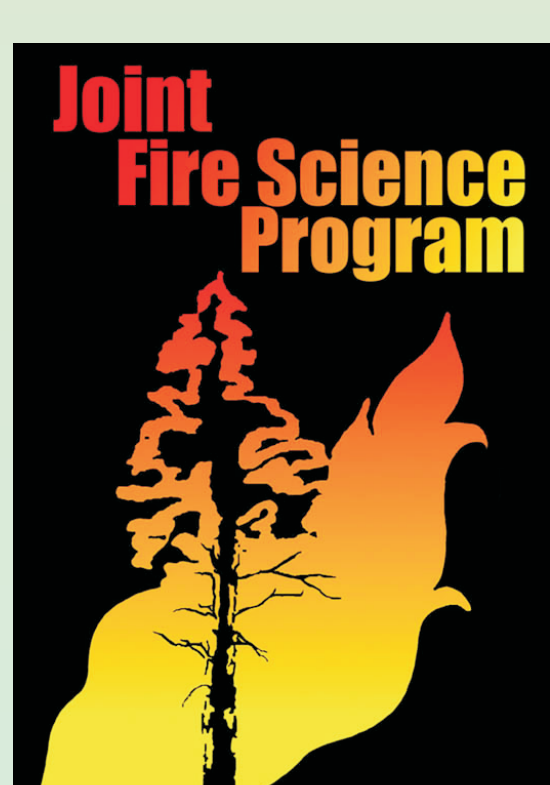
Timber rattlesnake.



Eastern box turtle.



Stem sprouts on pitch pine (*Pinus rigida*) 10 weeks after a late April fire.



U.S.D.A. Forest Service, Rocky Mountain Research Station, Fire Modeling Institute

Partners:

- ~ USDA Forest Service Fire and Aviation Management
- ~ Joint Fire Science Program
- ~ Rocky Mountain Research Station, Fire Fuel & Smoke program
- ~ The Nature Conservancy's Global Invasive Species Initiative
- ~ National Interagency Fuels Coordination Group

